Citect for Windows
Driver Specification
GETCP Driver

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Target Device and Protocol

Device Manufacturer

GE Fanuc Automation North America Inc.

Device Definition

This driver provides communication with GE Fanuc Series 90-70 and 90-30 PLCs using Winsock TCP/IP. An ethernet card with software providing a Winsock TCP/IP stack must be installed in the PC before this driver can be used. The Citect TCPIP driver is used to access winsock.

Host Requirements

Network card for ethernet
Winsock TCP/IP software for above network card (available from Microsoft for Windows for Workgroups 3.11, Windows 95 and Windows NT)
8 MB RAM
80386 or better CPU
This drivers does not requires any software from GE to run on the computer.

Communications Configuration

The TCP/IP network must be properly configured before installing this driver. In Windows for Workgroups this can be done using Windows Setup (in Main Group of Program Manager). Select Change Network Settings, and set up the TCP/IP protocol. In Windows 95 & NT, this can be done using Network utility in Control Panel. In particular, the correct values for IP Address, subnet mask and default gateway must be set. See your network administrator for details. This setup can be tested by using PING to check a response is received from the PLC. Open a DOS window, and type
c:\windows\ping a.b.c.d
where a.b.c.d is the IP address of the PLC. A response should be received. You should also receive a response if you ping the address you assigned for your local PC.

Using GEnet System Manager (GSM)

The GSM software is required to configure the IP address of the Ethernet controller in the PLC. See Appendix C for procedure
Using LM90 for later versions of Ethernet Interfaces
The LogicMaster software is required for rack and IP address configuration of module CMM 742 Ethernet modules and CPM 925 CPU this may also be the case for other models not tested . See Appendix C for procedure.

User Interface

Driver Name

GETCP

Boards Form

Board Type	TCPIP
Address	Must be set to 0
IO Port	Not used
Special Opt	Not used

Ports Form

Port Name	Port name
Port Number	Not used
Baud Rate	Not used
Data Bits	Not used
Stop Bits	Not used
Parity	Not used
Special Opt	-IA

where A is the IP address of the Ethernet Controller module in the GE PLC rack.

IO Device Form

Protocol	GETCP30 for GE 90/30 CPU
	GETCP70 for GE 90/70 CPU

NumberNetwork number (redundancy)
Port name Port name as used on Ports form
Address Not used.

IO Device variable types

IO Device Type	Citect data type	Description	Minimum Address	Maximum address
R%U	INT, LONG, BCD, LONGBCD, REAL	System register	1	16384
I%U	DIGITAL	Digital input	1	12288
Q%U	DIGITAL	Digital output	1	12288
G%U	DIGITAL	Global seamless	1	12288
T%U	DIGITAL	Temporary coil	1	256
M%U	DIGITAL	Internal coil	1	12288
S%U	DIGITAL	System status	1	128 Read Only
SA%U	DIGITAL	System memory A	1	128
SB%U	DIGITAL	System memory B	1	128
SC%U	DIGITAL	System memory C	1	128
AI%U	INT, LONG, BCD, LONGBCD, REAL	Analog input	1	8192
AQ%U	INT, LONG, BCD, LONGBCD, REAL	Analog Output	1	8192
PLCF%U	BYTE	PLC Fault bytes	0	683 Read only
IOF%U	BYTE	IO Fault bytes	0	1355 Read only

The maximum address value supported by the driver are given above, but the actual values should be set to correspond with the addresses available in the attached PLC.

Parameters and INI options

Standard Parameters

Block 256
Delay 0
MaxPending 8
Polltime 0
Timeout 1000
Retry 1
WatchTime 30

Special Parameters

MaxFrameBytes = 2048
The maximum size of the combined read data request to the PLC.

PROTDIR.DBF

PROTDIR.DBF should have an entry for this driver as follows:

Tag	File	Bit/Block	Max Length	Options
GETCP30	GE30	1024	2048	0x3ff
GETCP70	GE70	1024	2048	0x3ff

GE70.DBF

Template	Unit type	Raw type	Bit width	Low	High	Comment
R%U[%.u]	1	1	16	1	16384	Registers
I%U	2	0	1	1	12288	Digital Input
Q%U	3	0	1	1	12288	Digital Output
G%U	22	0	1	1	12288	Global
T%U	23	0	1	1	256	Temporary Memory
M%U	24	0	1	1	12288	Momentary Memory
S%U	25	0	1	1	128	System Fault RO
SA%U	26	0	1	1	128	System Memory A
SB%U	27	0	1	1	128	System Memory B
SC%U	28	0	1	1	128	System Memory C
AI%U	29	1	16	1	8192	Analog Inputs
AQ%U	30	1	16	1	8192	Analog Outputs
PLCF%U	20	8	8	0	683	PLC Fault bytes RO
IOF%U	21	8	8	0	1355	IO Fault bytes RO

Driver Specific Errors

Driver specific errors will be in the form 1xxxx.

example

105f4 Invalid input parameters in request.
105c3 Text length doe not match traffic type.

For complete list of errors see Table A-8. PLC CPU Error Codes in Host Communications Toolkit for C/C++ Applications User's Manual, GEC Fanuc Automation, manual number GFK-0870A, January 1995

Reference / Contacts

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